
State of North Dakota

Information Technology Department



Broadband Mapping

Project Plan

Version: *Final 1.0*

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Version Control

Once this document is formally approved, changes should be tracked and reviewed by the assigned individual in the table below:

Date	Author	Change	Reviewed and/or Approved By
2/8/10	Dirk Huggett	Original Draft	Duane, Brandy, Mark, Bob
2/9/10	Dirk Huggett	Changed ESC member, added review changes comments, added Deborah, edited communications plan	Duane

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INTRODUCTION

Purpose of this document

The purpose of the Project Plan is to define the project scope, schedule, budget, and quality expectations of the project, and to provide a comprehensive strategy for managing the project.

Background

A. *The Recovery Act*: Section 6001(l) of the Recovery Act requires the Assistant Secretary (of the US Dept of Commerce) to develop and maintain a comprehensive, interactive, and searchable nationwide inventory map of existing broadband service capability and availability in the United States that depicts the geographic extent to which broadband service capability is deployed and available from a commercial or public provider throughout each State. The Recovery Act requires the Assistant Secretary to make the national broadband map accessible by the public on an NTIA (National Telecommunications and Information Administration) Web site no later than February 17, 2011. The Recovery Act authorizes NTIA to expend up to \$350 million pursuant to the BDIA (Broadband Data Improvement Act) and for the purposes of developing and maintaining a broadband inventory map. Implementation of the BDIA is useful to fulfill Congress' intent to develop a national broadband map as expressed and funded under the Recovery Act.

B. *The Broadband Data Improvement Act (BDIA)*: The BDIA is intended to improve data on the deployment and adoption of broadband service to assist in the extension of broadband technology across all regions of the United States.⁴ Section 106 of the BDIA directs the US Secretary of Commerce to establish the State Broadband Data Program and to award grants to eligible entities to develop and implement statewide initiatives to identify and track the adoption and availability of broadband services within each State. In effecting this purpose, the BDIA provides several eligible uses for grant funds, including uses related to the gathering of broadband-related data at the State level and the development of statewide broadband maps.

C. *The State Broadband Data Program*: In keeping with the Recovery Act's direction that NTIA develop and maintain a comprehensive and interactive national broadband map and the requirements of the BDIA, NTIA has established this grant program. Awardees under this Program will receive grants to fund their collection of broadband-related data as well as funding for planning programs at the State level. Awardees will use the broadband-related data that they collect to develop statewide broadband maps, which will be linked to a Department of Commerce Web page. In addition, the awardees will submit all of their collected data to NTIA for use by NTIA and the Federal Communications Commission (FCC) in developing and maintaining the national broadband map, which will be displayed on an NTIA Web page before February 17, 2011.

Project Assumptions and Constraints

Assumptions:

- We will be able to get NTIA to extend the data deadline to April 30.

Constraints:

- NTIA expects a data delivery of March 30, 2010 with an update in Sept 2010.
- The Iron Triangle priority is: Quality, Schedule, Scope, Cost

List of related documents

The following documents are important to this project and provide additional information for review. They can be found in the ITD's file share (P drive) under Broadband Mapping Project\01 Initiation. These documents will also be posted to the project website at www.stagenet.nd.gov/projects/broadband.html.

- <P:\Broadband Mapping Project\01 Initiation\BC Charter Broadband Mapping v1 0 FINAL.docx>
- P:\Broadband Mapping Project\01 1 Grant\FR BroadbandMappingNOFA_090708.pdf
- <P:\Broadband Mapping Project\01 1 Grant\Grant Award Doc 38-50-M09050.PDF>

- <P:\Broadband Mapping Project\02 RFP-Contract\Broadband Mapping Services Contract FINAL.doc>
- <P:\Broadband Mapping Project\02 RFP-Contract\State of North Dakota Broadband Mapping TECHNICAL PROPOSAL.pdf>
- <P:\Broadband Mapping Project\02 RFP-Contract\State of ND Broadband Mapping COST PROPOSAL.pdf>

SCOPE MANAGEMENT

Scope Management involves the identification of all the work required, and only the work required, to complete the project successfully.

Project Scope Statement

We intend to hire a 3rd party to collect the broadband information and develop a web map application to use on the state's GIS infrastructure.

Product Description

The high-level scope is noted below. For more details, refer to the SOW portion of the contract and the RFP Response noted above.

IN SCOPE

- Collect coverage data from broadband providers
- Collect coverage data of broadband infrastructure from available public data
- Perform independent infrastructure measurements using web-based direct measurements
- Perform independent infrastructure measurements using survey research
- Model of broadband infrastructure and coverage in GIS format
- Perform an assessment of anchor institution rural broadband infrastructure
- Create and submit broadband infrastructure & coverage in NTIA format
- Develop an interactive broadband web map application

OUT OF SCOPE

- Create a plan for future needs and deployment of broadband for unserved and underserved communities

Scope Control

Scope control is concerned with influencing the factors that create scope changes, determining that a scope change has occurred, and managing the actual changes when and if they occur.

The project manager (PM) will manage changes to the scope through the Integrated Change Control procedure. When a stakeholder identifies a change in scope, they will use the following process:

- The project manager (PM) will document the change request and confirm the accuracy with the requestor.
- The PM reviews the request with the appropriate project team members for impact assessment.
- If the impact fits into the minimum requirements noted in the Budget & Schedule Control sections, (budget <10% of risk up to 50%, schedule < 1 week) and does not impact quality, the PM may approve the change if it is in the best interests of the project. The PM will document the change and report it in the next normal reporting period.
- If the impact is outside those parameters, the PM will implement the Integrated Change Control process.

Acceptance Management (Deliverable Acceptance Process)

Most deliverables will be submitted from a vendor. Below is the language from the contract regarding the acceptance process.

Upon receipt of each of the deliverables from CONTRACTOR, STATE will have 10 (ten) working days in which to accept or reject it in writing. If STATE rejects it, STATE will specify in writing its grounds for rejection and

CONTRACTOR shall use its best efforts to revise the deliverable to make it acceptable to STATE within the following 10 (ten) working days. If STATE rejects it a second time, STATE will have the option of repeating the procedure as described in this acceptance statement above or terminating this agreement upon written notice to CONTRACTOR. Acceptance of Task 10 (*management tasks*) will be based upon the quality and delivery of the deliverables identified. CONTRACTOR will invoice for this Task monthly. Travel expenses related to this deliverable will be handled as described in Section 30 of the contract.

Payment will be based upon the deliverable value less 10% retainage. The retainage payment will be made based upon final acceptance as noted in Section 29 of the contract.

Once a deliverable is submitted to the State PM for sign-off, the PM will work with the state project team to confirm the deliverable meets the required criteria. If it does, the PM will submit the acceptance form to the sponsor for signature and pass the invoice to accounting for payment. If the deliverable doesn't meet the requirements and we are unable to resolve the deliverable will be identified as an issue and follow the issue management process noted below.

Deliverable Acceptance Log

Below is the deliverables as defined in the SOW.

Section/Task/Deliverable	Start Date	Due Date	Acceptance Date
DATA COLLECTION	2/15/10		
Task 6 - Broadband provider data collection			
NDA agreement document, provider agreements or documentation of non-response.	2/15/10	4/1/10	4/15/10
Report of provider data status and copies of provider data where appropriate.	2/22/10	6/11/10	6/25/10
Task 7 - Broadband infrastructure inventory of available public data			
GIS data layers of preliminary broadband infrastructure and coverage (First Draft). Status report on public data collection activities and results. Market, demographic, and economic characteristics report.	2/16/10	2/26/10	3/12/10
Task 8 - Independent infrastructure measurements using web-based direct measurements			
Design and install web site	2/16/10	3/15/10	3/29/10
Brief report and full database of log-in campaign results.	3/16/10	6/14/10	6/28/10
Map Direct Measurement Data results (GIS Layers).	4/20/10	6/30/10	7/14/10
Task 9 - Survey Research across Four North Dakota Rural Strata			
Copy of proposed study design	4/1/10	4/29/10	5/13/10
Survey results	6/14/10	6/25/10	7/9/10
DEVELOPMENT			
Task 2 - Preliminary modeling of broadband infrastructure and coverage			
GIS data layers of preliminary broadband infrastructure and coverage (Second Draft). Status report on broadband data provider contacts and data acquisition, tracking	2/26/10	3/22/10	4/5/10

Section/Task/Deliverable	Start Date	Due Date	Acceptance Date
database of broadband provider data acquisition and contacts.			
Task 3 - Anchor institution rural broadband infrastructure assessment			
Anchor institution inventory	2/18/10	3/3/10	3/17/10
Summary report on coordinating with law enforcement, public safety, local gov on use of broadband technologies and maintenance of broadband mapping data.	6/7/10	6/25/10	7/9/10
Task 4 - Map Broadband Infrastructure coverage polygons and develop database			
Initial broadband infrastructure features (GIS layer) and first draft of infrastructure data in NTIA format.	3/23/10	4/13/10	4/27/10
Broadband service area coverage (GIS layer) and first draft of availability data in NTIA format.	4/14/10	5/3/10	5/17/10
Task 5 - Broadband infrastructure & coverage NTIA Format			
Broadband service areas by provider.	5/4/10	6/1/10	6/15/10
Broadband Infrastructure map by provider (point based and statewide).	6/2/10	6/28/10	7/12/10
Anchor Institutions (statewide)	6/29/10	7/23/10	8/6/10
Final Deliverables to NTIA.	7/26/10	8/11/10	8/25/10
Task 1 - Interactive broadband web map application			
Beta web map application	5/24/10	6/14/10	6/28/10
Final web map application	7/7/10	7/26/10	8/9/10
Web map application setup on State servers	7/27/10	8/6/10	8/20/10
MANAGEMENT			
Task 10 - Project Management, reporting and project administration including the items identified in Section 25 of the contract and the Communications section of the project management plan			
Month 1	1/4/10	2/1/10	2/8/10
Month 2	2/1/10	3/1/10	3/8/10
Month 3	3/1/10	4/1/10	4/8/10
Month 4	4/1/10	5/3/10	5/10/10
Month 5	5/1/10	6/1/10	6/8/10
Month 6	6/1/10	7/1/10	7/8/10
Month 7	7/1/10	8/2/10	8/11/10
Month 8	8/1/10	9/1/10	9/8/10
Month 9	9/1/10	10/1/10	10/8/10
FINAL ACCEPTANCE			
Final Acceptance	8/23/10	8/30/10	8/30/10

TIME MANAGEMENT

Project Time Management includes the processes required to ensure timely completion of the project.

Schedule

The deliverable list provides a high-level schedule for the project. The full schedule will be maintained in Primavera.

Schedule Control

The vendor will update the state PM using Microsoft Project. The state PM will update and monitor the schedule using Primavera. The PM will control changes to the schedule using the Integrated Change Control procedure. When the PM identifies a change in schedule may be required, he will use the following process:

- The project manager (PM) will document the schedule slippage required and review the request with the appropriate project team members for assessment.
- The PM will make adjustments if the project can accommodate the slippage without changing a milestone date by more than one week. The PM will document the adjustment and report it in the next normal reporting period.
- If a milestone date will need to move more than 1 week, the PM will implement the Integrated Change Control process.

Implementation and Transition Plan

The project schedule will depict the specific tasks for implementation. From a high-level perspective, the vendor will build the data and application on their own infrastructure. However, they will submit data to the state a couple of different times to test loading on the state system prior to the full transfer to the state infrastructure. Once the transfer is completed, the web application and data sets will become another layer to the state's GIS dataset/infrastructure and any changes will be handled using standard operating procedures.

The state will use the vendor for at least one data update in the 2011 calendar year. The same procedures used for the implementation will be used for the update of data. The contract also has options to update data via the vendor through 2014, but funding is not yet secured for that.

COST MANAGEMENT

Project Cost Management includes the processes required to ensure that the project is completed within the approved budget.

Budget

The chart below illustrates the high-level budget. A detailed budget will be maintained in the LPO Variance worksheet. Due to federal funding, it requires a fairly complex tracking system and quarterly updates to www.federalreporting.gov. Personnel hours will also be tracked in the LPO Variance worksheet.

	Appropriated	Reallocated	Total
Project (Broadband Mapping) Costs			
Tetra Tech	\$767,728		\$767,728
Tetra Tech Travel	\$39,000		\$39,000
Equipment	\$9,759	\$41,105	\$50,864
GIS Infrastructure		\$222,601	\$222,601
Project/Program Management	\$77,594	\$-	\$77,594
Staff-ITD	\$-	\$107,938	\$107,938
Project Development	\$56,430	\$-	\$56,430
Travel – ITD	\$2,254	\$2,364	\$4,618
LPO Charge	\$7,500		\$7,500
Supplies	\$564	\$7,554	\$8,117

Miscellaneous	\$6,399	\$6,240	\$12,638
Risk Contingency			\$-
Sub-Total	\$967,228	\$387,800	\$1,355,028
Management Reserve			
Sub-Total	\$967,228	\$387,800	\$1,355,028

Cost Control

The PM will monitor the budget using Primavera and the Variance spreadsheet. The PM will control changes to the budget using the Integrated Change Control procedure. When the PM identifies a change in budget may be required, he will use the following process:

- The project manager (PM) will document the budget adjustment required and review it with the appropriate project team members for assessment.
- Since there is no risk contingency or management reserve, all changes to the budget will require sponsor approval. The PM will use the Integrated Change Control process for this.

QUALITY MANAGEMENT

Project Quality Management includes the processes required to ensure that the project will satisfy the needs for which it was undertaken.

Quality Planning (Standards)

- ND Project Management Guidebook is the project management standard to which the project will adhere.
- National States Geographic Information Council's (NSGIC) Broadband Database Model template

Quality Assurance (Processes)

- Tetra Tech will provide early sample data (as scheduled) for ITD to test & review
- Schedule and cost variance will be calculated biweekly
- The stakeholders will identify quality issues during the test or review periods. The PM will control changes to the quality using the Integrated Change Control procedure. When the PM identifies a change due to a quality issue may be required, he will use the Scope/Schedule/Cost control process as appropriate. The ESC must approve any changes to actual quality.

Quality Control (Measurement of Process)

- Schedule and cost variance will not exceed 20%
- Minimum of 95% of the data imports into the state system without issue

INTEGRATED CHANGE CONTROL

Integrated change control is concerned with a) influencing the factors that create changes to ensure that changes are agreed upon, b) determining that a change has occurred, and c) managing the actual changes when and as they occur. Changes to the project can impact a variety of areas including Cost, Scope, Schedule, and Quality. Changes to the project that impact one or more of these areas must be approved via the change control process. The PM will track changes, whether pending, accepted, or rejected, using the LPO Variance spreadsheet.

The change control procedure is as follows:

- Requests for change will follow the processes found in the Scope, Schedule, Cost and Quality control sections found earlier in this document.
- If the project manager (PM) does not have the authority to approve the change he will escalate to the Executive Steering Committee (ESC) for approval

- Based upon the input of the project team, the PM, and the ESC, the project sponsor will provide final sign-off on any escalated change.
- All changes are documented in the Change Control Log by the PM.
- All approved changes are returned to project team for implementation.

HUMAN RESOURCES MANAGEMENT

Project Human Resources Management includes the processes required to make the most effective use of the people involved with the project.

Team Directory

The following is a list of all team members on the project.

Role	Name	Phone Number	Email Address
Project Sponsor and ESC Chair	Duane Schell	8-4360	dschell@nd.gov
ESC Member	Lisa Feldner	8-3193	lfeldner@nd.gov
ESC Member	Mike Ressler	8-1001	mressler@nd.gov
ESC Member	Dan Sipes	8-4317	dsipes@nd.gov
ESC Member	David Crothers	663-1099	dcrothers@yahoo.com
ESC Member	Pat Fahn	8-2400	pfahn@nd.gov
ESC Member	Mike Lynk	8-8150	mlynk@nd.gov
ESC Member	Laura Willard	8-5337	lwillard@nd.gov
ESC Member	Mark Molesworth	8-4474	mmolesworth@nd.gov
ND Project Manager	Dirk Huggett	8-1998	dhuggett@nd.gov
ND Procurement Officer/ Project Coordinator	Brandy Peterson	8-1888	blpeterson@nd.gov
ND Project Administration	Sean Lackner	8-1002	slackner@nd.gov
ND Telecomm Architect	Glen Rutherford	8-2489	grutherford@nd.gov
ND GIS Coordinator	Bob Nutsch	8-3212	bnutsch@nd.gov
ND Architect Associate	Dan Wanek	8-3263	dwanek@nd.gov
Public Information Officer	Deborah Mosset	8-1004	dmosset@nd.gov
TT Project Manager / GIS App Lead	Fred Gifford	406-458-1140	Fred.Gifford@tetrattech.com
TT Business Sponsor	Andy Bury	425-482-7877	Andy.Bury@tetrattech.com
TT Communications/ Speed Test Lead	Kate McMahon	406-863-9255	kate@appcom.net
TT Community Anchor & Provider Data Lead	Paul DeWolfe	406-327-0629	paul@access-consulting.net
TT Public Data & GIS Deliverables Lead	Ken Wall	406-532-3239	kwall@geodataservicesinc.com
Survey Lead	Neal Christensen		

Responsibility

<i>Role</i>	<i>Description</i>	<i>Formal Review</i>	<i>Informal Review</i>	<i>Provide Information</i>	<i>Supply Resources</i>	<i>Assist</i>	<i>Perform</i>
Project Sponsor	<p>The Sponsor has the ultimate authority and responsibility for the project. They champion the project and define the objectives. Other duties include:</p> <p>Monitor the project status</p> <p>Establish Priorities</p> <p>Provide Policy Direction</p> <p>Approve Project Team Member - Staff Increases</p> <p>Approve Budget Increases</p> <p>Approve Major Scope changes</p> <p>Resolve major issues</p>		X	X	X		
Executive Steering Committee	<p>The Executive Steering Committee is an advisory body to the Executive Sponsor. It consists of key stakeholders of the project.</p> <p>Other duties include:</p> <ul style="list-style-type: none"> • Monitor the project status • Advise on Priorities • Advise on Policy Direction • Approve Project Team Member - Staff Increases • Recommend Budget Increases • Advise on Major Scope changes • Resolve major issues 	X			X	X	
Project Manager	<p>Develop project plan</p> <p>Assist in developing the project goals, objectives, milestones, and functional/features requirements</p> <p>Create cost and time estimates with the help of the project team members</p> <p>Be a role model by showing enthusiasm and dedication toward the project</p> <p>Identify and resolve conflicts</p> <p>Attend periodic status meetings</p> <p>Monitor actual versus budgeted costs</p> <p>Communicate status of the project to customer management</p> <p>Arrange meetings for the project team</p> <p>Update and publish the Gantt chart periodically</p> <p>Identify problem areas, which need to be resolved</p> <p>Perform periodic status meetings</p> <p>Monitor time and cost</p> <p>Communicate status of the project to stakeholders and immediate supervisors</p>	X	X			X	
Subject Matter Experts (SMEs)/Leads	<p>Provide expert advice and guidance</p> <p>Perform tasks assigned by the project manager</p> <p>Lead areas assigned</p> <p>Responsible for deliverables in assigned area</p>			X			X
Public Information Officer	<p>Official external contact for all public information</p> <p>Sends out press releases</p> <p>Manages all press contacts</p>			X			X

Staffing Management Plan

The Project Sponsor must authorize any changes to staffing. New team members will meet with the project manager to review the project status and cover the role they are expected to play in the project. The project manager will handle any performance issues that require escalation through the direct supervisor.

Vendor team members will be handled as identified in the contract.

COMMUNICATIONS MANAGEMENT

Project Communications Management includes the processes required to ensure timely and appropriate generation, collection, dissemination, storage, and ultimately disposition of project information.

Communications Management Plan

Most communications for this project will be handled via e-mail. When necessary, the Project Manager will schedule a meeting to discuss a specific issue. Meeting materials will be sent out a day in advance, if possible, and a meeting summary, if necessary, will be e-mailed to attendees within 1 day.

This project falls under Large Project Oversight. The project will meet all communication requirements for that program.

The following table is a list of other communications. The project will have a website at www.stagenet.nd.gov/projects/broadband.html to give all stakeholders access to project documents such as the Business Case, Charter, and Status Reports.

Communication Tool	Description	Content	Frequency	Responsible	Recipient(s)	Location	Approval Required
Meeting	Executive Steering Committee Meetings	Convey project information or for the Sponsor to receive assistance on a project decision	Monthly. (Specific dates will be determined at the first meeting) and As Needed	PM	Sponsor, Executive Steering Committee, PM	As scheduled	No
MS Word	Executive Steering Committee Meeting Agendas and Minutes	Content will be dependent upon the meeting purpose	As performed	PM	Sponsor, Executive Steering Committee, Fred Gifford	Document Repository; Project Website	No
PDF	Status Report	<ul style="list-style-type: none">• Schedule• Milestones: Accomplished, Missed, Upcoming, At risk• Budget• Variance• Staffing• Changes• Risks• Issue Metrics	Biweekly by EOB Monday	PM	Sponsor, Executive Steering Committee, Project Team via e-mail All stakeholders via website	Document Repository; Project Website	No

Communication Tool	Description	Content	Frequency	Responsible	Recipient(s)	Location	Approval Required
		<ul style="list-style-type: none"> • Issues/Decisions made • Issues/Decisions upcoming • Action Item Metrics • Tasks accomplished during last week/ upcoming for the week 					
Meeting	Project Team	Review project status and risks	Last Monday of the month @ 3:00 CT	PM	Project Team	TBD & via conference call	No
www.stageneet.nd.gov/projects/broadband.html	Extended Stakeholder Website	Project documents, status reports and other important stakeholder communications	As documents are created	PM	All stakeholders	Document Repository; Project Website	No
MS Word	Quarterly Large Project Reports	Summary of project status as per template report	Within 2 weeks of calendar quarter end	PM	Sponsor, LPO Analyst	Document Repository; Project Website	Yes
MS Excel	Variance Report	Project Variance data	Within 2 weeks of calendar quarter end or as requested	PM	Sponsor, LPO Analyst	Document Repository; Project Website	Yes
MS Word	Project Management Documents	Required PM documents: Business Case, Charter, Project Plan, Startup Report, Post Implementation Report, Closeout Report	As approved	PM	Sponsor, ESC, LPO Analyst	Document Repository; Project Website	Yes
www.federal	Stimulus Grant Status	As required by	Within	PM	Federal	Excel in	No

Communication Tool	Description	Content	Frequency	Responsible	Recipient(s)	Location	Approval Required
reporting.gov & MS Excel	Report	template and system validation	10 days of calendar quarter end		Government, OMB	Document Repository; www.federalreporting.gov	
MS Excel & MS Word	NTIA Grant Status Reports	As required by template	Within 30 days of calendar quarter end	PM	NTIA, Sponsor	Document Repository	No
MS Excel	SF425 (Federal Fiscal Report)	As required by template	Within 30 days of calendar quarter end	Dan Sipes	NTIA	Document Repository	No
PDF/Email	Press Releases	Public Notice/Information	Monthly – dependent upon scheduled activity	Kate, Dirk, Deborah	Press, public	Document Repository; Project Website	No
Newspaper	Advertisement	Speed Test Information	Starting in March	Kate, Dirk, Deborah	Newspaper Association	Document Repository; Project Website	No
Webinar	Q&A Meeting on the project	Information on the objectives of the project	Once	Kate, Dirk	Broadband Providers	None	No
PDF/Paper	Media/Info Packets	Cover Letter Project Summary FAQ Speed Test Flyer	Available as requested	Kate, Dirk, Deborah	Press and as requested	Document Repository; Project Website	No
Email via Service Desk	Speed Test Request	Request for state employees to take the test from home	3 releases in March	Kate, Dirk, Deborah	All State & Higher Ed employees K12 if possible Other ESC contacts	Document Repository	No

RISK MANAGEMENT AND ISSUE MANAGEMENT

Risk Management is the systematic process of identifying, analyzing, and responding to project risks. It includes maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events to project objectives.

Risk Management Plan

The detailed risk management plan can be found at [Broadband Mapping Risk Mgmt Plan.doc](#).

The following is a breakout of the monitoring and controlling activities:

Monitoring: Risk owners are responsible for monitoring their risks and notifying the PM via e-mail when a trigger occurs and that the response plan has been initiated.

New Risk Identification: Any stakeholder can identify additional risks. The stakeholder should notify the project manager of the new risk (or possible risk) via e-mail.

Audits: The PM will be responsible for overseeing risk activities and ensuring the risk register is updated.

Review: The project team will review the project's risks monthly (in a team meeting).

Reporting: Risks will be reported in two ways.

1st the PM maintain a Risk Log in the project repository. The Risk Log will contain a list of risks that are active on the project, the priority of the risk, the assignment, and a current status.

2nd the monthly Status report and the quarterly Large Project Oversight report will contain a summary of the Risk Log and any new risks identified and added to the Risk Register.

Issue Management Plan

Issues differ from Risks because an Issue already exists; Risks are only a potential event. If a Risk occurs, it can become an Issue, and conversely, a new Issue can generate new Risks.

An issue is defined as a question or problem that requires a decision or research in order to be resolved. An issue control log is located in the [Variance Worksheet](#). Any stakeholder can raise an issue. The Project Manager will manage issues using the following process.

- The project manager (PM) will document the issue and confirm the accuracy with the requestor.
- The PM reviews the issue with the appropriate project team members for impact assessment and/or response.
- The Project Manager (PM) enters all issues identified into a issue control log.
- If the issue can be resolved without impact to CSSQ, the project manager will monitor and close the issue as appropriate.
- If the issue's resolution will impact CSSQ or if the issue cannot be resolved at the project level, the PM will escalate the issue to the ESC.

PROCUREMENT MANAGEMENT

An RFP was issued and the vendor selected as part of the grant processes. A contract was signed on January 15th with Tetra Tech. The contract can be found at [P:\Broadband Mapping Project\02 RFP-Contract](#). Brandy Peterson was the procurement officer and will continue that role for the life of the project.

Should there be problems with the vendor, an issue will be identified and follow the appropriate process. If the Project Managers can't resolve, it will be escalated to the Business Sponsors. If they can't resolve, an Executive Steering Committee meeting will be called and a representative from the Attorney General's Office will be consulted.

Project Plan Appendix

Appendix I – Project Schedule Baseline Snapshot

Activity ID	Activity Name	Start	Finish	Planned Total Cost
BBMapping - Data	Broadband Mapping - Data Project	02/16/2010 08 AM	09/30/2010 04 PM	\$782,951.00
BB1290	Start Project	02/16/2010 08 AM		\$0.00
BB1293	Final Acceptance	08/23/2010 10 AM	08/24/2010 10 AM	\$74,395.10
BB1295	Travel Costs	02/16/2010 08 AM	09/30/2010 04 PM	\$39,000.00
BB1300	End Project		09/30/2010 04 PM	\$0.00
BBMapping - Data.2	DATA COLLECTION	02/16/2010 08 AM	06/30/2010 10 AM	\$365,683.95
BB1340	Start Data Collection	02/16/2010 08 AM		\$0.00
BB1350	End Data Collection		06/30/2010 10 AM	\$0.00
BBMapping - Data.2.1	(Task 6) Broadband provider data colle...	02/16/2010 08 AM	06/11/2010 04 PM	\$88,290.00
BBMapping - Data.2.1.1	Develop & Negotiate NDAs/Conta...	02/16/2010 08 AM	06/03/2010 04 PM	\$32,760.00
BB1120	Create Template NDAs	02/16/2010 08 AM	02/19/2010 04 PM	\$0.00
BB1400	Contact Data Providers	02/22/2010 08 AM	03/05/2010 04 PM	\$0.00
BB1410	Negotiate NDAs	02/22/2010 08 AM	04/12/2010 04 PM	\$0.00
BB1420	Follow-up Contact Period	03/08/2010 08 AM	04/01/2010 04 PM	\$32,760.00
BB1430	Post April NDA work	04/05/2010 08 AM	06/03/2010 04 PM	\$0.00
BBMapping - Data.2.1.2	Gather Provider Data	02/22/2010 08 AM	06/11/2010 04 PM	\$55,530.00
BB1130	March 26th Deadline	02/22/2010 08 AM	03/25/2010 04 PM	\$0.00
BB1440	June 14th Deadline	03/26/2010 08 AM	06/11/2010 04 PM	\$55,530.00
BBMapping - Data.2.2	(Task 7) Broadband infrastructure inve...	02/16/2010 08 AM	03/10/2010 04 PM	\$39,730.95
BB1360	ITD Recieves 1st Data Dump	02/26/2010 08 AM	02/26/2010 04 PM	\$0.00
BB1370	Bob Performs Load & Review	03/01/2010 08 AM	03/05/2010 04 PM	\$0.00
BB1380	Meeting to review results & ID Issues	03/08/2010 08 AM	03/08/2010 10 AM	\$0.00
BB1390	State Documents Issues/Concerns an...	03/08/2010 10 AM	03/09/2010 10 AM	\$0.00
BBMapping - Data.2.2.1	Identify & Gather Public Data	02/16/2010 08 AM	02/26/2010 04 PM	\$39,730.95
BB1140	State Data	02/16/2010 08 AM	02/22/2010 04 PM	\$0.00
BB1450	FCC Data	02/16/2010 08 AM	02/22/2010 04 PM	\$0.00
BB1460	RFP Records	02/16/2010 08 AM	02/22/2010 04 PM	\$0.00
BB1470	Carrier Network Data	02/16/2010 08 AM	02/22/2010 04 PM	\$0.00
BB1480	Research & Acquire Commercial Datab...	02/16/2010 08 AM	02/22/2010 04 PM	\$0.00
BB1490	Send to ITD (Rod) missing codes	02/18/2010 08 AM	02/24/2010 04 PM	\$0.00
BB1500	Compile into 1st version GIS layers	02/23/2010 08 AM	02/25/2010 04 PM	\$0.00
BB1510	Develop Demographic Reports	02/16/2010 08 AM	02/26/2010 04 PM	\$39,730.95
BBMapping - Data.2.2.2	ITD Provides NRC data to TT	02/16/2010 08 AM	03/10/2010 04 PM	\$0.00
BB1145	NRC Data Dump 1 - 2/16	02/16/2010 08 AM	02/17/2010 04 PM	\$0.00
BB1520	NRC Data Dump 2 - 3/12	03/04/2010 08 AM	03/10/2010 04 PM	\$0.00
BBMapping - Data.2.3	(Task 8) Independent infrastructure me...	02/16/2010 08 AM	06/30/2010 10 AM	\$168,750.00
BB1530	ITD Recieves 4th Data Dump	06/22/2010 08 AM	06/22/2010 04 PM	\$0.00
BB1540	Bob Performs Load & Review	06/23/2010 08 AM	06/29/2010 04 PM	\$0.00
BB1550	Meeting to review results & ID Issues	06/30/2010 08 AM	06/30/2010 10 AM	\$0.00
BBMapping - Data.2.3.1	Design & Install Web Site	02/16/2010 08 AM	03/15/2010 04 PM	\$16,087.50
BB1150	Beta Site	02/16/2010 08 AM	02/26/2010 04 PM	\$0.00
BB1560	Stress Test	03/01/2010 08 AM	03/08/2010 04 PM	\$0.00
BB1565	State Sets Up Redirect	02/16/2010 08 AM	03/01/2010 04 PM	\$0.00

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Activity ID	Activity Name	Start	Finish	Planned Total Cost
	BB1570 Implement Web Site	03/09/2010 08 AM	03/15/2010 04 PM	\$16,087.50
⊖	BBMapping - Data.2.3.2 Execute Log-in Campaign	03/16/2010 08 AM	06/14/2010 04 PM	\$43,200.00
	BB1160 March 26th Deadline	03/16/2010 08 AM	03/26/2010 04 PM	\$0.00
	BB1580 June 14th Deadline	03/29/2010 08 AM	06/14/2010 04 PM	\$43,200.00
⊖	BBMapping - Data.2.3.3 Route Wireless Tests	03/01/2010 08 AM	04/19/2010 04 PM	\$0.00
	BB1590 Driving Complete	03/01/2010 08 AM	03/26/2010 04 PM	\$0.00
	BB1600 Compile and Review Data	03/29/2010 08 AM	04/19/2010 04 PM	\$0.00
⊖	BBMapping - Data.2.3.4 Deliver Raw Direct Measurement ...	04/20/2010 08 AM	06/21/2010 04 PM	\$109,462.50
	BB1170 Initial Data Cut (Route & March Speed ...	04/20/2010 08 AM	04/26/2010 04 PM	\$0.00
	BB1610 Final Data Cut	06/15/2010 08 AM	06/21/2010 04 PM	\$109,462.50
⊖	BBMapping - Data.2.4 (Task 9) Survey Research across Four ...	04/01/2010 08 AM	06/25/2010 04 PM	\$68,913.00
	BB1180 Study Design	04/01/2010 08 AM	04/29/2010 04 PM	\$37,278.00
	BB1185 Perform Study	04/30/2010 08 AM	06/11/2010 04 PM	\$0.00
	BB1190 Analysis and Reporting	06/14/2010 08 AM	06/25/2010 04 PM	\$31,635.00
⊖	BBMapping - Data.1 Map Development	02/16/2010 08 AM	08/23/2010 10 AM	\$266,611.95
	BB1320 Start Map Development	02/26/2010 08 AM		\$0.00
	BB1330 End Map Development		08/11/2010 04 PM	\$0.00
⊖	BBMapping - Data.1.2 (Task 2) Preliminary modeling of broadb...	02/26/2010 08 AM	03/31/2010 10 AM	\$34,563.60
	BB1030 GIS data layers of preliminary broadband...	02/26/2010 08 AM	03/22/2010 04 PM	\$34,563.60
	BB1630 ITD Recieves 2nd Data Dump	03/23/2010 08 AM	03/23/2010 04 PM	\$0.00
	BB1640 Bob Performs Load & Review	03/24/2010 08 AM	03/30/2010 04 PM	\$0.00
	BB1650 Meeting to review results & ID Issues	03/31/2010 08 AM	03/31/2010 10 AM	\$0.00
⊖	BBMapping - Data.1.3 (Task 3) Anchor institution rural broadb...	02/16/2010 08 AM	06/25/2010 04 PM	\$54,889.20
	BB1037 Determine Final Categories for Anchor I...	02/16/2010 08 AM	02/17/2010 04 PM	\$0.00
	BB1039 Public Safety Address List	02/16/2010 08 AM	02/22/2010 04 PM	\$0.00
	BB1040 Initial assessment of North Dakota Criti...	02/18/2010 08 AM	03/03/2010 04 PM	\$40,287.60
	BB1050 Provide analysis & Summary Report on ...	06/07/2010 08 AM	06/25/2010 04 PM	\$14,601.60
⊖	BBMapping - Data.1.4 (Task 4) Map Broadband Infrastructure...	03/23/2010 08 AM	05/12/2010 10 AM	\$58,482.45
	BB1060 Broadband Service Infrastructure in Pr...	03/23/2010 08 AM	04/13/2010 04 PM	\$32,508.45
	BB1070 Broadband Service Availability in Provi...	04/14/2010 08 AM	05/03/2010 04 PM	\$25,974.00
	BB1660 ITD Recieves 3rd Data Dump	05/04/2010 08 AM	05/04/2010 04 PM	\$0.00
	BB1670 Bob Performs Load & Review	05/05/2010 08 AM	05/11/2010 04 PM	\$0.00
	BB1680 Meeting to review results & ID Issues	05/12/2010 08 AM	05/12/2010 10 AM	\$0.00
⊖	BBMapping - Data.1.5 (Task 5) Broadband infrastructure & co...	05/04/2010 08 AM	08/11/2010 04 PM	\$49,934.70
	BB1080 Broadband service areas by provider	05/04/2010 08 AM	06/01/2010 04 PM	\$17,232.30
	BB1090 Broadband Infrastructure map by provi...	06/02/2010 08 AM	06/28/2010 04 PM	\$12,565.80
	BB1100 Anchor Institutions (statewide)	06/29/2010 08 AM	07/23/2010 04 PM	\$4,005.00
	BB1110 Final Deliverables to NTIA	07/26/2010 08 AM	08/11/2010 04 PM	\$16,131.60
⊖	BBMapping - Data.1.1 (Task 1) Interactive broadband web m...	04/05/2010 08 AM	08/06/2010 04 PM	\$68,742.00
	BB0095 Start Web Development	04/05/2010 08 AM		\$0.00
	BB0097 Finalize Architecture	04/05/2010 08 AM	04/23/2010 04 PM	\$0.00
	BB0099 Preliminary Design	04/26/2010 08 AM	05/21/2010 04 PM	\$0.00
	BB1000 Beta Web Map Application	05/24/2010 08 AM	06/14/2010 04 PM	\$24,840.00

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Activity ID	Activity Name	Start	Finish	Planned Total Cost
BB1003	Beta Transfer & Test w/ State	06/15/2010 08 AM	07/06/2010 04 PM	\$0.00
BB1005	ITD Tests Installs Beta Application	06/15/2010 08 AM	06/21/2010 04 PM	\$0.00
BB1007	Bob Loads & Reviews	06/22/2010 08 AM	07/02/2010 04 PM	\$0.00
BB1009	Meeting to review & ID Issues	07/06/2010 08 AM	07/06/2010 10 AM	\$0.00
BB1010	Final Web Map Application	07/07/2010 08 AM	07/26/2010 04 PM	\$33,912.00
BB1020	Transfer Final Version & Test w/ State	07/27/2010 08 AM	08/06/2010 04 PM	\$9,990.00
BB1025	End Web Development		08/06/2010 04 PM	\$0.00
BBMapping - Data.1.6	ITD Implementation Prep	05/05/2010 08 AM	05/11/2010 04 PM	\$0.00
BB1710	Prep work	05/05/2010 08 AM	05/11/2010 04 PM	\$0.00
BBMapping - Data.1.7	ITD Implementation	07/27/2010 08 AM	08/23/2010 10 AM	\$0.00
BB1720	Final Data Set Load	08/12/2010 08 AM	08/13/2010 04 PM	\$0.00
BB1730	Load Final App	07/27/2010 08 AM	07/28/2010 04 PM	\$0.00
BB1780	Migrate to Production	08/19/2010 10 AM	08/23/2010 10 AM	\$0.00
BBMapping - Data.1.7.1	Testing	07/27/2010 08 AM	08/19/2010 10 AM	\$0.00
BB1740	Application Testing	07/27/2010 08 AM	08/09/2010 04 PM	\$0.00
BB1750	Load Testing	08/12/2010 08 AM	08/18/2010 04 PM	\$0.00
BB1760	UAT	08/12/2010 08 AM	08/18/2010 04 PM	\$0.00
BB1770	UAT Team Meeting	08/19/2010 08 AM	08/19/2010 10 AM	\$0.00
BBMapping - Data.3	MANAGEMENT	02/16/2010 08 AM	09/30/2010 04 PM	\$37,260.00
BB1199	Start of Project Management	02/16/2010 08 AM		\$0.00
BB1200	January	02/16/2010 08 AM	02/16/2010 04 PM	\$4,140.00
BB1210	February	02/16/2010 08 AM	02/26/2010 04 PM	\$4,140.00
BB1220	March	03/01/2010 08 AM	03/31/2010 04 PM	\$4,140.00
BB1230	April	04/01/2010 08 AM	04/30/2010 04 PM	\$4,140.00
BB1240	May	05/03/2010 08 AM	05/28/2010 04 PM	\$4,140.00
BB1250	June	06/01/2010 08 AM	06/30/2010 04 PM	\$4,140.00
BB1260	July	07/01/2010 08 AM	07/30/2010 04 PM	\$4,140.00
BB1270	August	08/02/2010 08 AM	08/31/2010 04 PM	\$4,140.00
BB1280	September	09/01/2010 08 AM	09/30/2010 04 PM	\$4,140.00
BB1310	End of Project Management		09/30/2010 04 PM	\$0.00
BBMapping - Data.3.1	State PM	02/16/2010 08 AM	09/30/2010 04 PM	\$0.00
BB1789	Start State PM	02/16/2010 08 AM		\$0.00
BB1790	LPO Reporting	02/16/2010 08 AM	09/30/2010 04 PM	\$0.00
BB1800	Federal Reporting	02/16/2010 08 AM	09/30/2010 04 PM	\$0.00
BB1810	Biweekly Progress Reports	02/16/2010 08 AM	09/30/2010 04 PM	\$0.00
BB1820	ESC Meetings	02/16/2010 08 AM	09/30/2010 04 PM	\$0.00
BB1830	Project Control	02/16/2010 08 AM	09/30/2010 04 PM	\$0.00
BB1840	Startup Report	02/16/2010 08 AM	03/01/2010 04 PM	\$0.00
BB1850	Post Implementation Review	08/23/2010 10 AM	09/14/2010 10 AM	\$0.00
BB1860	Closeout Report	09/14/2010 10 AM	09/15/2010 10 AM	\$0.00
BB1880	End State PM		09/30/2010 04 PM	\$0.00